

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

Listing of Claims:

1. **(Currently amended)** A microarray of polymeric biomaterials comprising:
 - a base comprising a substantially smooth cytophobic surface; and
 - a plurality of discrete dry polymeric biomaterial elements non-covalently bound to said cytophobic surface, wherein each of said polymeric biomaterial elements includes a soluble synthetic polymer, and at least two of said polymeric biomaterial elements include different soluble synthetic polymers.
2. **(Currently amended)** A microarray of polymeric biomaterials comprising:
 - a base comprising a substantially smooth cytophobic surface; and
 - a plurality of discrete dry non-monolayer polymeric biomaterial elements bound to said cytophobic surface, wherein each of said polymeric biomaterial elements includes a soluble synthetic polymer, and at least two of said polymeric biomaterial elements include different soluble synthetic polymers.
3. **(Original)** The microarray of claim 1 or 2, wherein said base comprises a material selected from the group consisting of glass, plastic, metal, ceramic, and combinations thereof.
4. **(Original)** The microarray of claim 1 or 2, wherein said cytophobic surface comprises a hydrogel.
5. **(Original)** The microarray of claim 4, wherein said hydrogel comprises a polymer selected from the group consisting of homopolymers of methacrylic acid esters, homopolymers of alkylene oxides, homopolymers of alkylene glycols, copolymers thereof, and mixtures thereof.

6. **(Original)** The microarray of claim 4, wherein said hydrogel comprises a polymer selected from the group consisting of poly(methyl methacrylate), poly(isobutyl methacrylate), poly(pentyl methacrylate), poly(2-hydroxy-ethyl methacrylate), copolymers thereof, and mixtures thereof.
7. **(Withdrawn)**
8. **(Original)** The microarray of claim 1, wherein said polymeric biomaterial elements are bound to said cytophobic surface via a non-covalent interaction selected from the group consisting of chemical adsorption, hydrogen bonding, surface interpenetration, ionic bonding, van der Waals forces, hydrophobic interactions, magnetic interactions, dipole-dipole interactions, and combinations thereof.
9. **(Original)** The microarray of claim 2, wherein said polymeric biomaterial elements are bound to said cytophobic surface via an interaction selected from the group consisting of chemical adsorption, hydrogen bonding, surface interpenetration, covalent bonding, ionic bonding, van der Waals forces, hydrophobic interactions, magnetic interactions, dipole-dipole interactions, and combinations thereof.
10. **(Original)** The microarray of claim 1 or 2, wherein each of said polymeric biomaterial elements comprises at least one polymer selected from the group consisting of synthetic polymers, adducts thereof, and mixtures thereof.
11. **(Original)** The microarray of claim 10, wherein said synthetic polymers are selected from the group consisting of polyamides, polyphosphazenes, polypropylfumarates, synthetic poly(amino acids), polyethers, polyacetals, polycyanoacrylates, polyurethanes, polycarbonates, polyanhydrides, poly(ortho esters), polyhydroxyacids, polyesters, polyacrylates, ethylene-vinyl acetate polymers, cellulose acetates, polystyrenes, poly(vinyl chloride), poly(vinyl fluoride), poly(vinyl imidazole), poly(vinyl alcohol), and chlorosulphonated polyolefins.

12. **(Withdrawn)**
13. **(Withdrawn)**
14. **(Original)** The microarray of claim 12, wherein said compound is non-covalently bound to the synthetic polymer component or components of the polymeric biomaterial.
15. **(Original)** The microarray of claim 1 or 2, wherein each of said polymeric biomaterial elements are between 10 and 1000 μm in diameter.
16. **(Original)** The microarray of claim 1 or 2, wherein each of said polymeric biomaterial elements are between 50 and 500 μm in diameter.
17. **(Original)** The microarray of claim 1 or 2, wherein said polymeric biomaterial elements are disposed at between 100 and 1200 μm intervals in a rectangular microarray.
18. **(Original)** The microarray of claim 1 or 2, wherein said polymeric biomaterial elements are disposed at between 300 and 500 μm intervals in a rectangular microarray.
19. **(Original)** The microarray of claim 1 or 2, wherein said polymeric biomaterial elements are present at a density on said cytophobic surface that ranges from 1 to 1,000 polymeric biomaterial elements per cm^2 .
20. **(Original)** The microarray of claim 1 or 2, wherein said polymeric biomaterial elements are present at a density on said cytophobic surface that ranges from 10 to 100 polymeric biomaterial elements per cm^2 .
- 21-54 **(Withdrawn)**
55. **(Withdrawn)**

56. **(Withdrawn)**

57. **(Previously Presented)** The microarray of claim 10, wherein at least one of said polymeric biomaterial elements further comprises a small molecule drug.

58. **(Withdrawn)**